

the data packet using a specific long code corresponding to the communicating transceiver to obtain an encoded data packet, the random access channel comprising a Reverse Packet Channel, the communicating transceiver sending said encoded data packet on said Reverse Packet Channel; and

wherein the base station assigns a searcher to the communicating transceiver in response to said searcher request message and sends a searcher assignment to the communicating transceiver.

10. The system recited in claim 9 wherein the base station includes a plurality of searchers for locating the encoded data packet based on the specific long code; and wherein the base station includes a controller for locating an idle searcher from said plurality of searchers and for sending the specific long code to said idle searcher.

11. The system recited in claim 9 wherein the digital communication system includes a Packet/Paging Channel on the forward link; wherein the communicating transceiver sends a Packet/Paging Channel Request Message to the base station on the access channel; and wherein the base station assigns the communicating transceiver to said Packet/Paging Channel in response to receiving said Packet/Paging Channel Request Message.

12. The system recited in claim 9 wherein the base station includes a plurality of searchers for locating the encoded data packet based on the specific long code; wherein the base station has a searcher assignment waiting list; and wherein if the base station is unable to locate an idle searcher from said plurality of searchers, the base station places the communicating transceiver on said searcher assignment waiting list.

13. The system recited in claim 12 wherein when one of the plurality of searchers becomes a new idle searcher, the base station removes the communicating transceiver from the searcher assignment waiting list and assigns the communicating transceiver to said new idle searcher.

14. The system recited in claim 13 wherein each of the plurality of transceivers has a priority level; wherein an assigned transceiver has an assignment to one of the plurality of searchers; and wherein when said priority level of said assigned transceiver becomes lower than said priority level of the communicating transceiver, the base station revokes said assignment from said assigned transceiver resulting in a revoked transceiver and assigns the communicating transceiver to said one searcher.

15. In a digital communication system for communicating digital information between a communicating transceiver and a base station having a searcher, said digital communication system having a forward link and a reverse link, a method for communicating a data packet, comprising the steps of:

requesting reservation of said searcher by said communicating transceiver;

encoding a data packet with a specific long code corresponding to said communicating transceiver to obtain an encoded data packet;

providing to said searcher said specific long code corresponding to the communicating transceiver;

first sending said encoded data packet on a random access channel over said reverse link by said communicating transceiver from among a plurality of digital transceivers each having a different long code, said plurality of digital transceivers sharing said random access channel;

first receiving said encoded data packet on said random access channel from said reverse link by a base station,

said searcher recognizing said encoded data packet as being sent by said communicating transceiver based on said corresponding specific long code being provided to said searcher;

second sending said digital information over said forward link by said base station; and

second receiving said digital information from said forward link by said communicating transceiver.

16. The method recited in claim 15, further comprising first communicating a paging message and a control message on a broadcast channel over the forward link; and interleaving the digital information with said paging message and said control message on said broadcast channel.

17. The method recited in claim 16 wherein the digital communication system is a CDMA communication system, the method further comprising combining the broadcast channel and a data packet channel to obtain a Packet/Paging Channel on the forward link, said Packet/Paging Channel including a Packet Subchannel and a Paging Subchannel.

18. The method recited in claim 17, further comprising controlling, via a power control subchannel on the Packet/Paging Channel, a power level of the data packet when sending the data packet to the base station.

19. The method recited in claim 15, further comprising communicating the data packet from the communicating transceiver to the base station over a dedicated channel.

20. The method recited in claim 19 wherein each of the plurality of transceivers has a bandwidth demand, the method further comprising first switching from the random access channel to the dedicated channel when said bandwidth demand exceeds a first threshold level.

21. The method recited in claim 20, further comprising second switching from the dedicated channel to the random access channel when the bandwidth demand drops below a second threshold level.

22. The method recited in claim 19 wherein the digital communication system is a cellular system having a network of individual cell sites; and wherein an active mobile transceiver from among the plurality of digital transceivers is communicating on the random access channel, the method further comprising switching said active mobile transceiver from the random access channel to the dedicated channel if said active mobile transceiver is undergoing a succession of handoffs between individual cell sites within said network of individual cell sites.

23. The method recited in claim 15 wherein the digital communication system includes a broadcast channel for communicating system information and an access channel for making access requests, said system information including paging messages, and wherein the random access channel comprises a Reverse Packet Channel, the method further comprising:

third sending a searcher request message on said access channel by the communicating transceiver;

first assigning a searcher to the communicating transceiver by the base station in response to said searcher request message;

fourth sending a searcher assignment to the communicating transceiver by the base station; and

encoding the data packet using a specific long code corresponding to the communicating transceiver to obtain an encoded data packet;

wherein the first sending step includes transmitting said encoded data packet on said Reverse Packet Channel over the reverse link.

24. The method recited in claim 23, further comprising locating an idle searcher from among a plurality of searchers; and fifth sending the specific long code to said idle searcher.